

# ELECTRONIC PERMIT SUBMITTAL SYSTEM

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May 30, 1997

Ms. Janet Stromberg  
Supervising Air Quality Engineer  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

Dear Ms. Stromberg:

I am enclosing comments resulting from our initial review of Bay Area Air Quality Management District's May 1, 1997 submittal of ten re-proposed Title V permits. These initial comments deal with our review of the District's response to EPA's January 31, 1997 letter with respect to the periodic monitoring issue and to our "General Comments Applicable to All Proposed Permits."

First, thank you for fully addressing EPA's "General Comments." The District's response is consistent with the agreements we worked out during the District's 90-day response period. We appreciate the time the District has spent discussing these issues with us, and the subsequent time and effort put into making the revisions.

With respect to periodic monitoring, we recognize that the District has added additional periodic monitoring for certain units. However, the District's application of periodic monitoring requirements is based on an interpretation of the forthcoming Compliance Assurance Monitoring (CAM) rule which is no longer current. This is further discussed in the enclosure. The District's approach, to be consistent with the District Regulation 2-6-409.2 and part 70, must address periodic monitoring for all applicable requirements, not just those that apply to units with emissions above the major source thresholds. As a practical matter, we believe there are few additional changes necessary in order to make the proposed permits consistent with the periodic monitoring requirements. We describe three of these changes in the enclosed

comments. These comments were discussed on the conference call between Bay Area and EPA on May 23, 1997.

We would like to request that the changes identified in the enclosure be made prior to the end of the 45 day review period, which ends June 13. This would involve the District submitting new proposed permits for the sources identified in the enclosure. If the changes are made as described in the enclosure, or pursuant to an agreement that we may reach, we will not require any additional review after June 13. As there are only two weeks remaining in the 45 day review, we have specifically identified most necessary changes. We request that you let us know if the changes will not be resubmitted before June 13, so that we can discuss with you the best way to proceed.

We are still reviewing Bay Area's response to EPA's source-specific comments. In the next week, we will provide the results of this review, and will identify which of the ten permits are acceptable as proposed, and which ones require small changes to monitoring or other requirements. Again, we appreciate the thought and effort that has gone into these proposed permits. If you have any questions, please contact me at (415) 744-1254, or Martha Larson of my staff at (415) 744-1170.

Sincerely,

Matt Haber  
Chief, Permits Office

enclosure

cc: Ray Menebroker, California Air Resources Board  
Rodney M. Helfrich, U.S. Pipe and Foundry  
Thomas Brafford, General Chemical  
Benjamin Zamora, Acme Fiberglass  
Kurt Haunschild, East Bay MUD  
James Chen, Union Sanitary  
James Parker, Fleischmann's Yeast  
Helen Farnham, City of Sunnyvale  
Alan Bahl, Universal Foods  
Scott Stinebaugh, City of Santa Rosa  
Michael Lewis, Western Fiberglass

Enclosure  
EPA Initial Review of May 1, 1997 Title V Permit Submittal

1. Bay Area's Approach to Periodic Monitoring. Bay Area states, in the response to EPA comment, that:

"In determining if additional monitoring is justified at this time, the District has taken as a starting point the most recent information available on EPA's draft Compliance Assurance Monitoring (CAM) rule. It is our understanding that EPA intends the CAM rule to be the document that sets forth guidance and requirements for periodic monitoring in Title V permits. It is our further understanding that EPA plans to phase in CAM requirements, with full implementation of all CAM requirements to occur when the permits are renewed after the first five years. With all the uncertainties that exist in this new program, we believe this is a very wise approach. Therefore, in analyzing emission limits for which additional monitoring might be warranted in the initial round of permitting, the District is focusing on equipment with emissions over the major source thresholds. Should the final CAM rule include requirements for smaller emission sources, the District will add monitoring requirements as necessary when the permits are renewed or reopened for other reasons."

This approach has resulted in Bay Area considering monitoring for a smaller universe of applicable requirements than is appropriate. Although EPA was considering, at one point, using the CAM rule to elaborate on the periodic monitoring requirements of 40 CFR part 70, EPA has since decided that CAM will not address periodic monitoring. CAM will not replace, but will be in addition to, the current part 70 periodic monitoring requirements. Periodic monitoring requirements are applicable now and will not be phased in. EPA's Office of Air Quality Planning and Standards has confirmed that it is also their understanding that source owners remain subject to part 70 monitoring requirements irrespective of the status or the requirements of CAM. While not relevant to periodic monitoring, we note that CAM will apply not only to major units, but to units that would have the potential to emit over the major source thresholds without considering controls. In many cases, a lesser degree of monitoring may be acceptable for small, uncontrolled emission points. However, we have identified three specific areas where periodic monitoring is appropriate:

a. U.S. Pipe and Foundry In response to EPA comments on additional periodic monitoring, the District identified the cupola (Unit S-1) as a possible candidate for additional periodic monitoring due to the high level of SO<sub>2</sub> emissions (90.1 tpy reported in Title V application). The District provided EPA with test results from a source test performed on April 10, 1997. The results from the test showed that the SO<sub>2</sub> emissions were not detected in any of the three runs performed when the cupola was fired on coke with a 0.68% sulfur content. The District stated that no periodic monitoring was required because the SO<sub>2</sub> emission from the test are much lower than the rule 9-1-302 limit of 300 ppm. In addition, the District supported the April 1997 test results with similar test results from a 1988 source test on the cupola. The reason given for such low levels of

SO<sub>2</sub> emissions when firing on coke is that sulfur is removed during the melting process via flux material (limestone) or slag.

We appreciate the District's and US Pipe and Foundry's commitment to resolve this periodic monitoring issue and are pleased to see that SO<sub>2</sub> emissions are not detectable when firing on coke with a sulfur content of 0.68%. We are, however, concerned that higher sulfur coke may result in a detectable level of SO<sub>2</sub> emissions, and in fact could cause SO<sub>2</sub> emissions to exceed the 300 ppm limit. We are also uncertain about the role that the amount of limestone charged to the cupola plays in reducing SO<sub>2</sub> emissions.

We raised this concern with Janet Stromberg and Brenda Cabral of BAAQMD on Friday, May 23, 1997. During the conversation we discussed the idea of requiring periodic testing of the coke sulfur content in lieu of an annual source test for SO<sub>2</sub> to ensure that the applicable limit of 300 ppm SO<sub>2</sub> is not exceeded. There were two options discussed to establish the sulfur test: (a) the source could agree to limit coke sulfur content to 0.62%, and keep records of the coke supplier's certification of the fuel sulfur content, or (b) the source could propose a different sulfur content limit based on past operating records of coke sulfur content, if available, and keep records to demonstrate compliance with that limit. Each option may require a one time source test to ensure compliance with the SO<sub>2</sub> limit when firing coke at the permitted fuel sulfur limit.

b. General Chemical The primary emissions unit at this facility, S-1, is the sulfuric acid manufacturing process. This process is controlled by devices A1 ("dual absorption system") and A2, (a mist eliminator) which are estimated in the source's application to have efficiencies of 99.7% and 99.99%, respectively. The unit has a CEM which will be used to demonstrate compliance with its SO<sub>2</sub> limits. However, the unit also has SIP limits which apply to TSP, SO<sub>3</sub> and acid mist emissions. Uncontrolled, the SO<sub>3</sub> emissions of this unit would be 165 tons per year based on AP-42 emission factors (see AP-42 Table 8.10-2, reformatted 1/95). Under District Rule 6-320, S-1 is subject to a 0.04 grain/dscf limit on SO<sub>3</sub> and acid mist emissions. Additionally, S-1 is subject to other opacity and TSP limits under District Rules 6-301, 6-310, and 6-311. These requirements are all federally enforceable. In order to provide a basis for certifying compliance, we request that the source be required to perform some type of periodic monitoring. The following are examples of acceptable monitoring. We realize that additional information on this unit may open up other options for demonstrating compliance:

- i) A periodic source test on TSP, SO<sub>3</sub> and acid mist to ensure that the applicable emission limits are being met.
- ii) If there is no water vapor plume from stack S-1, then opacity monitoring may be an appropriate surrogate for the TSP limits.

iii) Depending on the operation of the control device, periodic monitoring or observation of operating parameters may be the best way of ensuring continued high performance of the control. Regular (daily or weekly) control device monitoring, combined with records of maintenance, would be appropriate.

c. Opacity Monitoring Rule 6-301 sets federally-enforceable limits on opacity. A source has an obligation to certify, at least once per year or more often as required by the permit authority, whether compliance with the applicable opacity standard was continuous or intermittent. Implicit in this obligation is that the source has collected data throughout the compliance period for which they can then rely on when making the certification. We are enclosing guidance developed by EPA Region 7 which may be helpful in determining the appropriate frequency and type of monitoring method for each limit. At a minimum, we request that opacity monitoring for the following units be included in the permits to provide a basis for certifying compliance:

U.S. Pipe and Foundry Units S-1, S-4, S-5, S-8, S-15, S-16, and S-32. For uncontrolled units, periodic monitoring (daily or weekly) using Method 9 or 22 is appropriate. For infrequently operated units, monitoring frequency can be tailored to the unit's actual periods in operation. For Units S-1, S-4, S-8, and S-32, which are controlled by baghouses, the operation of the baghouse should be considered in developing periodic monitoring. As an alternative to opacity monitoring for these units, the source may demonstrate that a well-operated baghouse will ensure compliance with opacity limits. If the source makes this demonstration, then the permits could include good baghouse maintenance requirements in place of opacity monitoring requirements. In this case, the permit conditions on the baghouses should account for low pressure drop that may occur with bag breakage. Also, the permits should specify a frequency at which the pressure drop must actually be checked and corrective action taken.

Fleishman's Yeast Unit S-3. This unit has opacity limits as well as a PM limit of 0.01 grains/dscf. Because S-3 is controlled by a wet scrubber (Unit A-3), good monitoring and maintenance requirements for A-3 could potentially be substituted for opacity monitoring requirements on S-3.

During periods that the following units are fired on oil or on other fuels that can result in visible emissions, periodic opacity monitoring should be included:

<u>Fleishman's Yeast</u>	Units S-1 and S-2
<u>East Bay MUD</u>	Units S-37, 38, and 39
<u>City of Sunnyvale</u>	Units S-14 and S-15
<u>Union Sanitary</u>	Unit S-15
<u>City of Santa Rosa</u>	Units S-29, 30, 31

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